SANYO

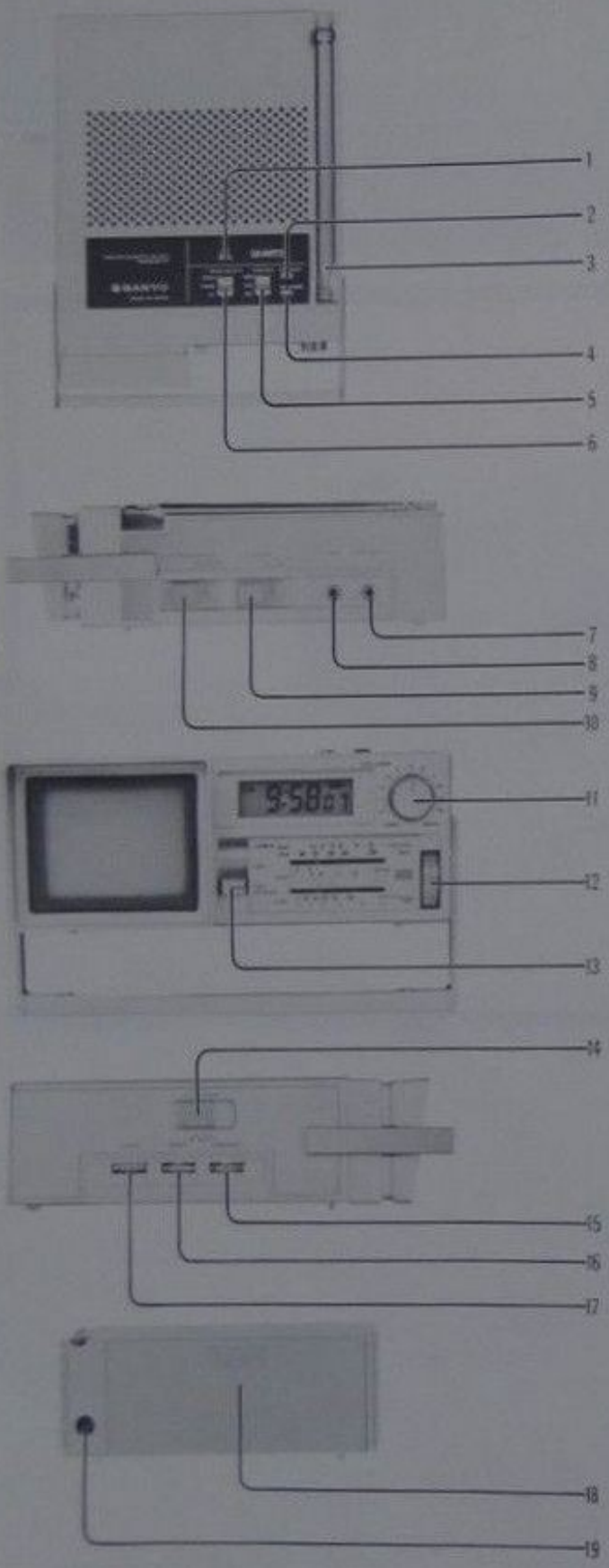
TPM2170

MINI B/W TV
AM/FM RADIO
DIGITAL ALARM CLOCK

OWNER'S MANUAL

111 6 4111 97878 TMF.KUW 102

Controls



1 Light button (LIGHT)
Push this switch to illuminate the LCD clock display.

2 Mode Select button (MODE SELECT)
See page 5.

3 Telescopic Antenna
Use this antenna to receive TV (VHF, UHF) and FM broadcast.

4 Time Advance button (TIME ADVANCE)
See page 5.

5 Time Set switch (TIME SET)
See page 5.

6 Timer Select switch (TIMER SELECT)
Set the selector to wake up with Buzzer, Radio or TV.

7 External Antenna jack (EXT ANT)
Connect the Antenna Adaptor (optional) for use with an external antenna to the jack.

8 Earphone jack (EAR)
For private listening, plug the earphone (supplied) into the jack.

9 TV Select switch (TV SELECT)
Set this switch to desired channel band.

10 TV-Radio Select switch (TV-RADIO SELECT)
Select your desired function, TV or Radio (AM or FM).

11 Volume control (VOLUME)
Adjust to obtain your favorite volume output.

12 Tuning knob
Tune to your desired channel or station and obtain vivid picture and clear sound.

13 Main switch
Turn the power ON or OFF or Timer function.
When recharge the rechargeable battery pack (optional), plug in the AC Adaptor packed with the set and turn this switch to OFF(charge) or TIMER position.

14 TV System switch (TV SYSTEM)
Set this switch to desired television system.

15 Contrast control (CONTRAST)
Adjust this control to obtain proper black and white elements of the picture.

16 Brightness control (BRIGHT)
Adjust this control to obtain favorite brilliance of the picture.

17 Vertical Hold control (V-HOLD)
Adjust this control to stop up or down movement of the picture.

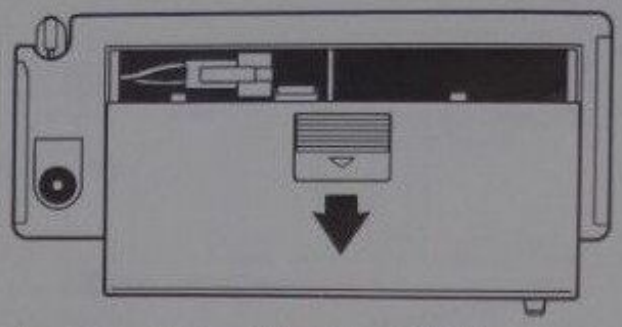
18 Battery Compartment
Remove the lid by pushing to the direction of an arrow and install dry cells or rechargeable battery pack.

19 External Power jack (DC IN 9V)
When use the set on AC 110-120V or 220-240V or external DC 12-volt, plug the AC Adaptor or Car Battery Cord Model MDC-53B (optional) into this jack.

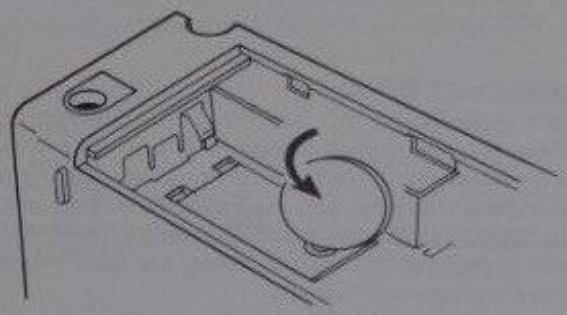
Power Supply

Battery Power Operation
Silver Oxide Battery for Clock (supplied)

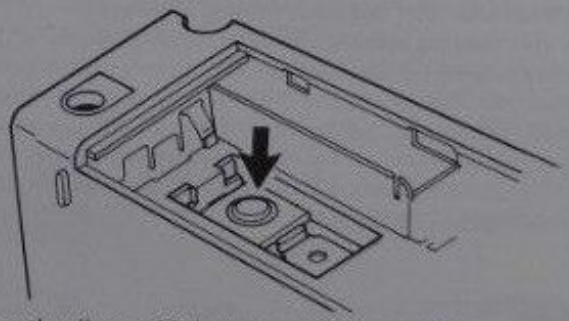
1. Open the battery compartment lid by pushing it in the direction of arrow.



2. Remove the silver oxide battery compartment cover by loosening it with a coin.



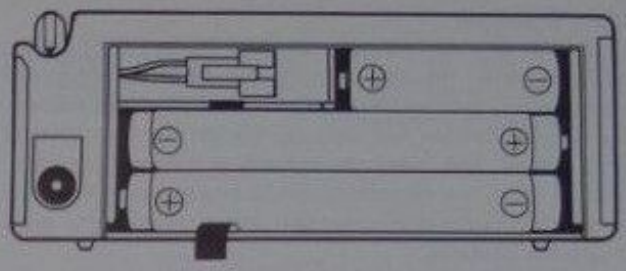
3. Install the Silver Oxide Battery (ANSI S 10, IEC SR 43) in place. The battery must be installed in position with the "+" mark facing down.



4. Close the silver oxide battery compartment cover.
5. Close the battery compartment lid.
   NOTE: The service life of the Silver Oxide Battery is about 2 years in normal use. If the brightness of the LCD clock is dimmed or if the LCD clock is beginning to run slow (accuracy: about ±1 second/day at 73° F), replacement of the silver oxide battery will be necessary.
   The Silver Oxide Battery may be obtained from your SANYO dealer.

Dry Cell Battery for TV or Radio (optional)

1. Open the battery compartment lid by pushing it in the direction of arrow.
2. Install 5 "AA, UM/SUM-3" cells as illustrated. Be careful about the polarity of each cell.



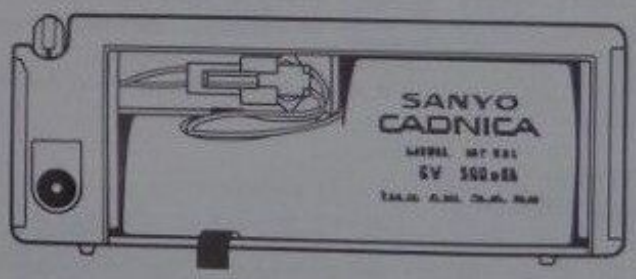
3. Close the battery compartment lid.
   NOTE: The AC Adaptor and Car Battery Cord must be unplugged from the set and the AC Adaptor disconnected from the wall outlet.
   If the picture shrinks in size and does not fill the screen, the batteries are exhausted and all batteries must be replaced by new ones. Exhausted batteries may leak and damage the set.
   Playing time on dry cell batteries very much depends on the quality of batteries. Use only batteries of excellent quality, preferably alkaline batteries.

Using Precautions for Dry Cell Battery

Do not take mixed using of exhausted and powerful battery or of different type.
Do not charge unrechargeable battery.
Do not discard or leave the cell in fire or at a place with high temperature.
Do not short the battery.

Rechargeable Battery (optional)
Battery Pack Installation

1. Open the battery compartment lid by pushing it in the direction of arrow.
2. Push the Battery Pack (Model NTP-550B) into the compartment until it fits firmly.
   NOTE: Make sure the negative (−) contact of the Battery Pack firmly contacts with the spring terminal of the set.



3. Insert the 2-pin polarized plug of the Battery Pack into the connector of the set.
4. Close the Battery Compartment lid.
   Cautions: Do not short the battery.
   Do not throw the battery into fire.
   Do not disassemble the battery.
   Do not charge the battery with another instrument and do not use the battery for other instrument.

Battery Operation

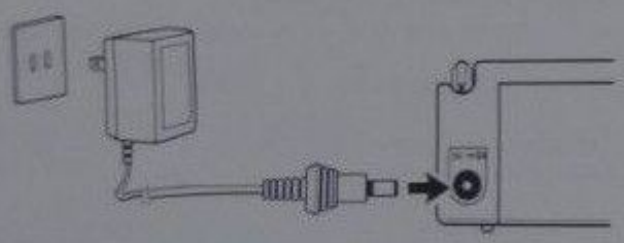
The plug of the AC Adaptor and Car Battery Cord must be unplugged from the set and the 2-blade plug of the AC Adaptor must also be disconnected from the wall otulet. A fully charged battery will operate the set for approximately 2.5~3 hours. The need for recharging the battery will be indicated when the picture shrinks in size and does not fill the screen. When recharging is needed, stop operating the set and recharge the battery.

NOTE: Recharge the battery for about 30 hours before initial use or when you have not used the battery for several months.

Battery Recharging

Battery Recharging can be accomplished only when the Main switch is set to the OFF(charge) or TIMER position and the set plugged into an AC outlet. The set is designed to recharge the battery even the Main switch in TIMER position except during the time the TIMER function is working on Buzzer, TV or Radio. This is a convenient feature for people who use the TIMER function frequently. When the need for battery recharging is indicated, follow the steps below.

1. Insert the 1-pin plug of the AC Adaptor (supplied) into the receptacle marked "DC IN 9V" and the 2-blade plug into an AC outlet.



2. Set the Main switch to the OFF(charge) or TIMER position. The battery will be automatically charged.
3. A complete recharge will take approximately 30 hours. The battery may be recharged at any time by leaving the set plugged in while not in use so that the battery will always be fully charged and ready for portable operation.

   NOTE: To operate the set, the AC Adaptor must be unplugged from the set.

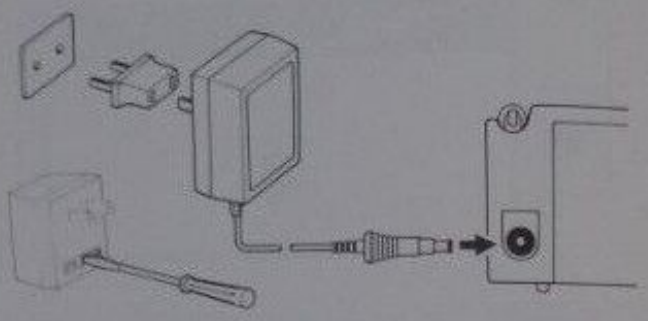
AC Power Operation

Voltage Adjustment

This AC Adaptor is factory adjusted for 230-volt AC. If you use the unit on different voltage, set the Voltage Select switch, located on the AC Adaptor, according to your local voltage.

AC Plug Adaptor

Two AC Plug Adaptor are packed with the set, besides the AC Adaptor which has 2-blade plug. If the AC Adaptor does not fit to a household outlet, attach the either AC Plug Adaptor.



Connection to AC Outlet

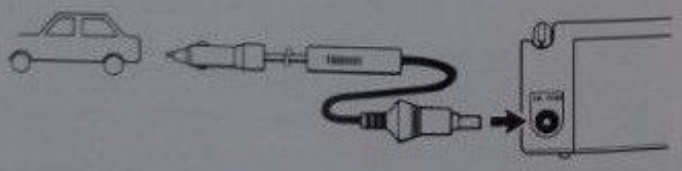
Before connecting the AC Adaptor to a household outlet, make sure that the Voltage Selector of the AC Adaptor is correctly set to your local voltage. Insert the 1-pin plug of the AC Adaptor into the receptacle marked "DC IN 9V" and the 2-blade plug into an AC household outlet. When the AC Adaptor is plugged into the receptacle, the built-in batteries are automatically disconnected.

Caution: Use ONLY with AC adaptor supplied.

Do not attempt to use this adaptor with another television or transistor radio.

External DC (Car battery) Power Operation

This unit may be operated in an automobile having a 12-volt negative ground battery with the Car Battery Cord (optional). Connect the Plug of the Car Battery Cord into the receptacle marked "DC IN 9V" on the rear of the set and the other end into cigarette lighter socket of your car. The internal battery circuit is automatically disconnected when the Car Battery Cord is plugged into the set.

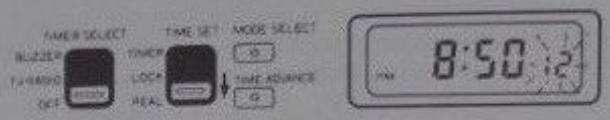


Accessories supplied with this TV

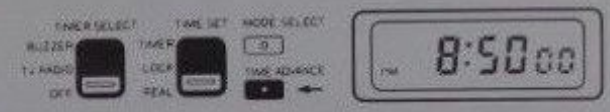
AC Adaptor	1
Earphone	1
Silver Oxide Battery (G12) for LCD Clock	1
AC Plug Adaptor	2
Battery Case	2
Carrying Case	1
Hood for TV Screen	1

How to set the Time

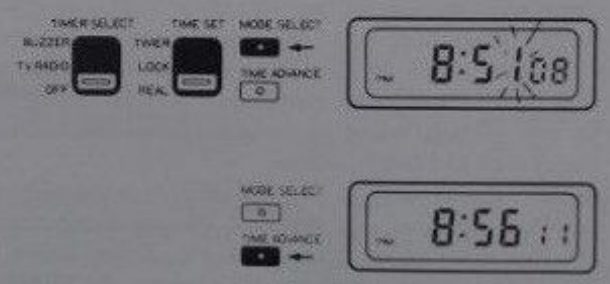
1. Set the Time Set switch to "REAL" position, and the second digits start flashing.



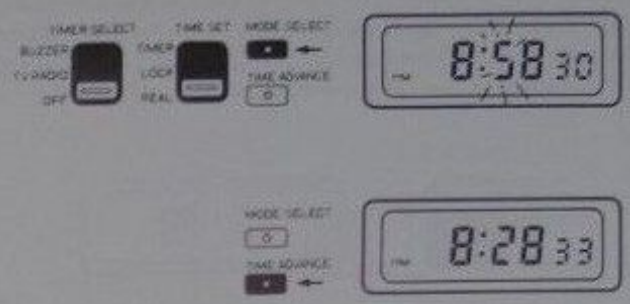
2. Push the Time Advance button. The second digits are reset to "00", and then start to count "01", "02", --- immediately.
NOTE: When the seconds are anywhere between "00" and "29", the seconds are reset to "00".
When the seconds are anywhere between "30" and "59", one minute is added and the seconds are reset to "00".



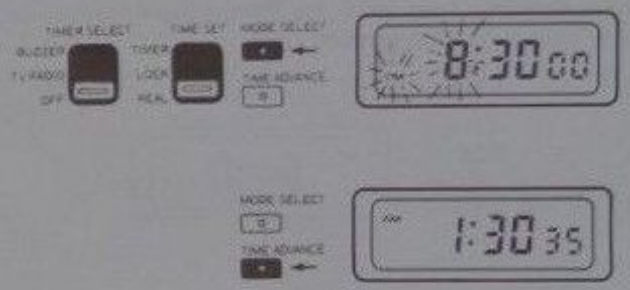
3. Push the Mode Select button and the minute digit starts flashing. Then push the Time Advance button until your desired minute appears. One digit is advanced by each pushing of the Time Advance button.



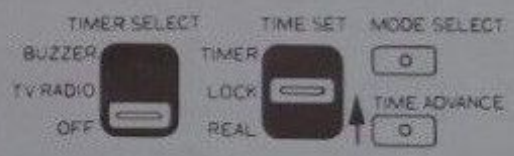
4. Push the Mode Select button and the ten-minute digit starts flashing. Then push the Time Advance button until your desired number appears.



5. Push the Mode Select button and the hour digits and AM or PM mark start flashing. Push the Time Advance button until your desired hour appears. Make sure if it is set in AM or PM.



6. After setting the time, set the Time Set switch to "LOCK" position.

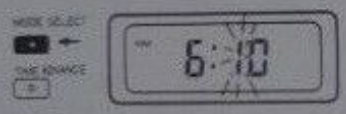


Caution: Do not change the Time Set switch abruptly. The clock display may not indicate "TIMER" or "REAL" function if you change the Time Set switch to "TIMER" or "REAL" position suddenly. In this case return the switch to "LOCK" position, then move the switch to "TIMER" or "REAL" position slowly.

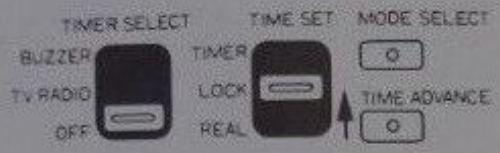
How to set the Alarm Time

1. Set the Time Set switch to TIMER position, and the minute digit starts flashing. Then push the Time Advance button until your desired minute appears. One digit is advanced by each pushing of the Time Advance button.

2. Push the Mode Select button and the ten-minute digit starts flashing. Then push the Time Advance button until your desired number appears.

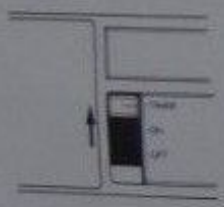


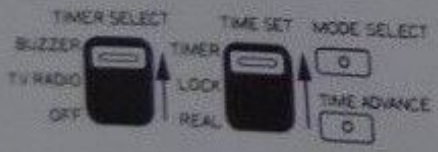
3. Push the Mode Select button and the hour digits start flashing. Then push the Time Advance button until your desired number appears.
4. Push the Mode Select button and AM or PM mark starts flashing. Then push the Time Advance button to select AM or PM.
5. After setting the alarm time, move the Time Set switch to "LOCK" position.



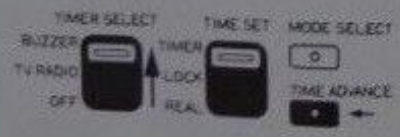
Wake up with Beep Sound

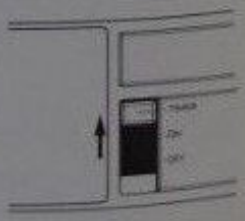
1. Set the alarm time by following the instructions under "How to set the alarm time".
2. Set the Main switch to "TIMER" or "ON" and the Timer Select switch to "BUZZER" position. The timer stand-by mark "" appears on the display.





3. When the alarm time previously set comes, beep sound begins and continues for four minutes.
   NOTE: When beep sound becomes to continue only for a very short period of time, it is necessary to replace the Silver Oxide Battery with a new one.
4. To turn the beep sound off, move the Timer Select and the Main switch to "OFF" position.
   NOTE: If you want to wake up with beep sound at the same time next day, push the Time Advance button to turn off the beep sound and leave the Timer Select in "BUZZER" position and the Main switch in "TIMER" position.





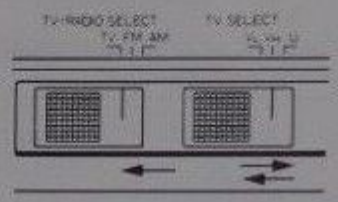
Operations

Television Operation

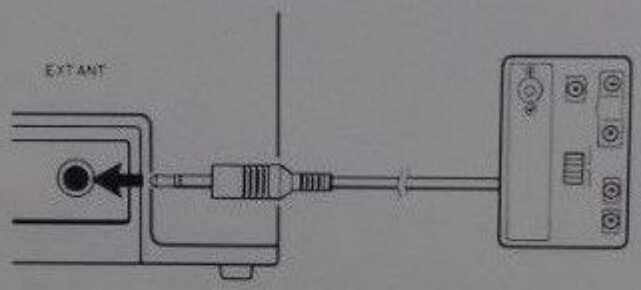
1. Set the Main switch to the ON position.
2. Set the TV System switch to "EUR" position for CCIR (CCIR-B or G) reception, and to "US" position for US (CCIR-M) reception, and to "UK" position for United Kingdom (CCIR-I) reception.
3. Set the TV-Radio Select switch to the TV position, then set the TV Select switch to your desired channel band.

VHF LOW	EUR	2 to 4
	US	2 to 6
VHF HIGH	EUR	5 to 12
	US	7 to 13
UHF	UK, EUR	21 to 69
	US	14 to 83

NOTE: This television receiver is not designed for use in France.



4. Pull out the telescopic antenna.
   When an external antenna is used, insert the plug of Antenna Adaptor Model AMT-375B (optional) to the EXT ANT jack located on the right side of the set and connect the lead-in cable to terminals on the Antenna Adaptor, depending on the type of antenna.



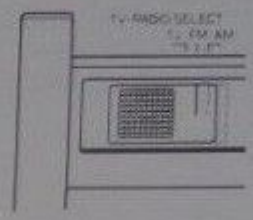
5. Tune in a desired station by turning the Tuning knob until the clearest sound and sharpest picture are obtained.
6. Adjust the length and direction of the telescopic antenna for the optimum picture quality.
7. Use the Contrast control to provide the proper contrast between the black and white portions of the picture. Use the Brightness control to adjust the brilliance of the picture.
8. Adjust the Volume control for your desired volume.
9. To turn off the TV, set the Main switch to the OFF(charge) position.

VERTICAL PICTURE MOTION

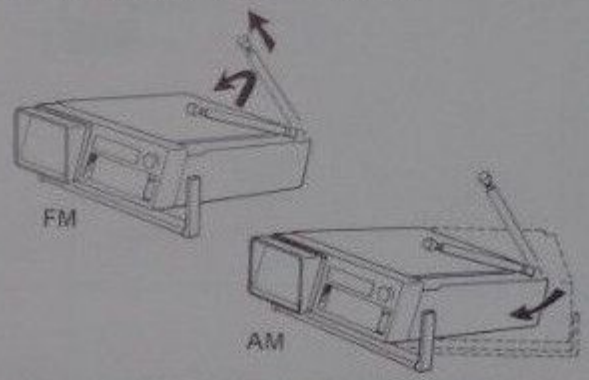
When the picture is moving up or down on the screen adjust Vertical Hold (V-HOLD) control until there is no vertical movement.

Radio Reception

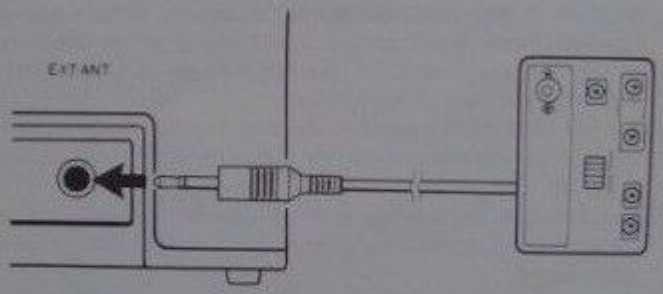
1. Set the Main switch to the ON position.
2. Set the TV-Radio Select switch to your desired radio band (AM or FM).



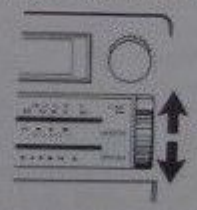
3. For FM reception, pull out the telescopic antenna and determine the direction, length and angle for the best reception. For AM reception, the antenna inside the unit is somewhat directional. When receiving a distant station, rotate the unit for best sound quality.



When an external antenna is used, insert the plug of Antenna Adaptor Model AMT-375B (optional) to the EXT ANT jack located on the right side of the set and connect the lead-in cable to terminals on the Antenna Adaptor.



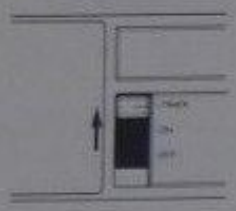
4. Tune in a desired station by turning the Tuning knob.



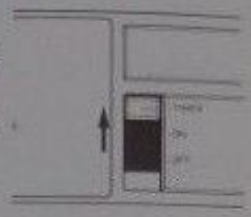
5. Adjust the Volume control for your desired volume.
6. To turn off the Radio, set the Main switch to the OFF (charge) position.

Wake up with Radio or TV

1. Set the alarm time by following the instructions under "How to set the alarm time".
2. Move the Main switch to "ON" position and tune to the desired station or channel with which you want to wake up. Adjust the volume control.
3. Set the Main switch to "TIMER" position and the Timer Select switch to "TV/RADIO" position.
   The timer stand-by mark "" appears on the display.

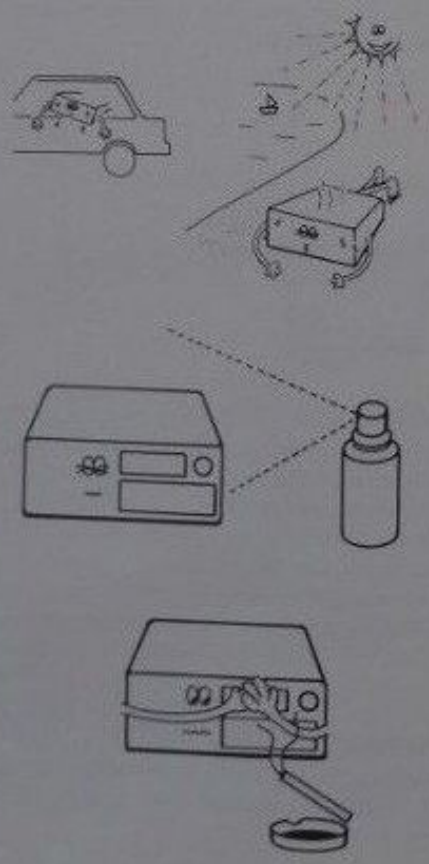


4. When the predetermined time reaches, the radio or TV will begin to operate and will remains "ON" for up to 60 minutes.
5. To turn TV or Radio off, move both the Timer Select and the Main switch to the "OFF" position.
   NOTE: If you want to wake up with TV or radio at the same time next day, push the Time Advance button to turn off the TV or radio and leave the Timer Select switch in "TV/RADIO" position and Main switch in "TIMER" position.



6. To enjoy TV or radio program continuously, set the Main switch to the "ON" position.

Helpful Hints

Helpful Hints

- Always use the AC Adaptor supplied with the set. If any other AC Adaptor is used instead, the switch mechanism inside the receptacle will not work, and cause the batteries to heat up and leak.
- Do not expose this appliance to direct sun for a long period of time. It may cause damage to the cabinet. It can become too hot inside a car parked in the sun or at the beach in strong direct sunlight. To prevent damage to the cabinet, shade the set from direct sunlight.
- Do not operate the set if it becomes too hot by being left inside a car exposed under the direct sunlight, wait until it cools off.
- Do not open the cabinet. High voltage is used inside and is dangerous. If something is wrong with your set, consult your dealer.
- When the unit is not to be used for an extended period of time, it is recommended that AC Adaptor or Car Battery Cord be removed from the outlet and also the batteries be removed from the battery compartment. Exhausted batteries may leak and damage the set.
- The surfaces of the cabinet can easily be damaged if not properly maintained. Many common household aerosol sprays, cleaning agents, solvents and polishes will cause permanent damage to these fine surfaces. Best results for cleaning are obtained with mild soap and a damp cloth, with a soft cloth for drying.
- Be careful not to injure the surface of the LCD clock.
- Do not expose the LCD clock surface to the fire of a cigarette etc., color fading will result to the clock display.